

Welcome from Working Group 2.5

Ron Boisvert, Chair NIST, USA

August 1, 2011





International Federation for Information Processing

- a non-governmental, nonprofit umbrella organisation of national societies working in the field of Information Technology
- established in 1960 under the auspices of UNESCO as a result of the first World Computer Congress held in Paris in 1959





- Represents IT Societies from 55 countries or regions, covering 5 continents with a total membership of over half a million
- Links more than 3500 scientists from academia and industry, organised in 97 Working Groups reporting to 13 Technical Committees
- Sponsors 100 conferences yearly





Technical Committees

TC1	Foundations of Computer Science
TC 2	Software: Theory and Practice
TC 3	Education
TC 5	Computer Applications in Technology
TC 6	Communication Systems
TC 7	System Modelling and Optimization
TC 8	Information Systems
TC 9	Relationship between Computers and Society
TC 10	Computer Systems Technology
TC 11	Security and Protection in Info Processing Systems
TC 12	Artificial Intelligence
TC 13	Human-Computer Interaction
SG16	Specialist Group on Entertainment Computing



Working

Groups

Technical Committee 2

Software: Theory and Practice

- WG 2.1 Algorithmic Languages and Calculi
- WG 2.2 Formal Description of Programming Concepts
- WG 2.3 Programming Methodology
- WG 2.4 Software Implementation Technology
- WG 2.5 <u>Numerical Software</u>
- WG 2.6 Database
- WG 2.7 (= WG 13.4) User Interface Engineering
- WG 2.8 Functional Programming
- WG 2.9 Software Requirements Engineering
- WG 2.10 Software Architecture
- WG 2.11 Program Generation
- WG 2.12 Web Semantics
- WG 2.13 Open Source Software

http://www.ifiptc2.org/



Working Group 2.5

Numerical Software

- Aim: to improve the quality of numerical computation by promoting development and availability of sound numerical software
- 37 years old
- 31 members from 13 countries (plus 18 affiliates)



WG 2.5 Activities



- Promote information exchange, awareness
- Participation in standardization/improvement processes for languages, libraries, tools
- Joint book: *Accuracy and Reliability in Scientific Computing, 2005,* (Bo Einarsson, Ed.)
- Meetings, workshops and conferences



WG 2.5 Meetings

Recent venues

- Hong Kong, 2005
- Uppsala, 2007
- Toronto, 2008
- Raleigh, 2009
- Leuven, 2010

Associated workshop

 Opportunity to promote WG 2.5 interests and to hear about regional activities, concerns







Working Conferences



- Nine held
- Published proceedings (IFIP Press)
- Topical, recent examples ...
 - The Architecture of Scientific Software, Ottawa, 2000
 - Grid-based Problem-Solving Environments, Arizona, USA, 2006
 - Uncertainty Quantification in Scientific Computing, Colorado, USA, 2011



For more information on WG 2.5, see

http://www.nsc.liu.se/wg25/









